



SEQUENCE LISTING

<110> CHOO, YEN
ISALAN, MARK

<120> NUCLEIC ACID BINDING PROTEINS

<130> 019496-006700US

<140> 09/646,353
<141> 2000-09-17

<150> GB 9805576.7
<151> 1998-03-17

<150> GB 9806895.0
<151> 1998-03-31

<150> GB 9807246.5
<151> 1998-04-03

<160> 81

<170> PatentIn Ver. 2.1

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Pro Tyr Lys Cys Pro Glu Cys Gly Lys Ser Phe Ser Gln Lys Ser Asp
1 5 10 15

Leu Val Lys His Gln Arg Thr His Thr Gly
20 25

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<400> 2

Pro Tyr Lys Cys Ser Glu Cys Gly Lys Ala Phe Ser Gln Lys Ser Asn
1 5 10 15

Leu Thr Arg His Gln Arg Ile His Thr Gly Glu Lys Pro
20 25

<210> 3

<211> 5

<212> PRT

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<220>

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<400> 3
Thr Gly Glu Lys Pro
1 5

<210> 4
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<220>
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<222> (5)
<223> 5-methyl cytosine, Thymine or Cytosine

<400> 4
gcggnggcg 9

<210> 5
<211> 10
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<220>
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<400> 5
Arg Glu Asp Val Leu Ile Arg His Gly Lys
1 5 10

<210> 6
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Arg Ala Asp Ala Leu Met Val His Lys Arg
1 5 10

<210> 7
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1

5

10

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Arg Ala Asp Ala Leu Met Val His Lys Arg
1 5 10

<210> 9

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<400> 9

Arg Gly Pro Asp Leu Ala Arg His Gly Arg
1 5 10

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<400> 10

Arg Glu Asp Val Leu Ile Arg His Gly Lys
1 5 10

<210> 11

<211> 60

<212> DNA

<213> Artificial Sequence

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<400> 11

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<210> 12

<211> 39

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<222> (8)..(11)

<223> GGMC or GMGC, where M is 5-Methyl Cytosine

<400> 12

tatagtgnnn nggcgtgtca cagtcagtcc acacacgtc

39

<210> 13

<211> 9

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<400> 13

ggcccgccg

9

<210> 14

<211> 9

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<400> 14

gcgcggcg

9

<210> 15

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<222> (10)

<223> 5-Methyl Cytosine

<400> 15

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39

<210> 16

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39

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<220>
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<223> 5-Methyl Cytosine, Thymine or Cytosine

<400> 17
tatagtgggn cggcgtgtca cagtcagtcc acacacgtc

39

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<220>
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<223> 5- Methyl Cytosine, Thymine or Cytosine

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<210> 19
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<210> 20
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<400> 20
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1 5

<210> 21
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<400> 21
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1 5

<210> 22
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1 5

<210> 23
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1 5

<210> 24
<211> 7

<212> PRT
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<400> 24
Arg Ser Asp Glu Leu Thr Arg
1 5

<210> 25
<211> 7
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<400> 25
Arg Ser Asp Asp Leu Ser Gln
1 5

<210> 26
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
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<400> 26
Arg Ser Asp Asp Leu Thr Arg
1 5

<210> 27
<211> 7
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<220>
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<400> 27
Arg Ser Asp Asp Leu Thr Gly
1 5

<210> 28
<211> 7
<212> PRT
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<220>
<223> Description of Artificial Sequence: Zinc finger

peptide

<400> 28
Arg Ser Asp His Leu Ser Ala
1 5

<210> 29
<211> 7
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<220>
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<400> 29
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1 5

<210> 30
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<220>
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1 5

<210> 31
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1 5

<210> 32
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<400> 32
His Asn Arg Asp Arg Lys Arg

<210> 33
<211> 7
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<220>
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<400> 33
Thr Asn Ser Thr Arg Thr Lys
1 5

<210> 34
<211> 7
<212> PRT
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<220>
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<400> 34
Arg Asn Asp His Arg Lys Thr
1 5

<210> 35
<211> 9
<212> DNA
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<220>
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<220>
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gggnccggcg

9

<210> 36
<211> 9
<212> DNA
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<220>
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<400> 36
gggcccggcg

9

<210> 37
<211> 9
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<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<220>
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<222> (3)
<223> 5-Methyl Cytosine

<400> 37
ggngcggcg

9

<210> 38
<211> 9
<212> DNA
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<220>
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<400> 38
ggcgcggcg

9

<210> 39
<211> 6
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<220>
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<400> 39
Met Ala Glu Glu Lys Pro
1 5

<210> 40
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<223> Any amino acid

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<223> Any amino acid

<220>
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<223> Any amino acid

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      -10                  -5                  -1      1

Xaa Leu Xaa Xaa His Xaa Xaa Xaa His
      5                      10

<210> 41
<211> 4
<212> PRT
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<220>
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<400> 41
Thr Gly Glu Lys
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<210> 42
<211> 5
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<223> Pro may or may not be present

<400> 42

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Thr Gly Glu Lys Pro
1 5

<210> 43
<211> 9
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<400> 43
gcggcggc 9

<210> 44
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 44
gcgttggc 9

<210> 45
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 45
gcgtggc 9

<210> 46
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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<400> 46
gggnccggc 9

<210> 47
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<212> DNA
<213> Artificial Sequence

<220>
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<400> 47
gggccggcg

9

<210> 48
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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<220>
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<223> 5-Methyl Cytosine

<400> 48
ggngcggcg

9

<210> 49
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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<400> 49
ggcgcggcg

9

<210> 50
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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<220>
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<222> (3)
<223> 5-Methyl Cytosine

<400> 50
ggnccggcg

9

<210> 51
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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oligonucleotide

<400> 51
gggtcggcgcg

9

<210> 52
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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oligonucleotide

<400> 52
ggtgccggcg

9

<210> 53
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<220>
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<222> (4)
<223> 5-Methyl Cytosine

<400> 53
gggnccggcg

9

<210> 54
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 54
gggtcggcgcg

9

<210> 55
<211> 9
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<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<220>
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<223> 5-Methyl Cytosine

<400> 55
gcggnggcg

9

<210> 56
<211> 9
<212> DNA
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<220>
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<400> 56
gcggccgcg

9

<210> 57
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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oligonucleotide

<220>
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<222> (5)
<223> 5-Methyl Cytosine

<400> 57
gcggncgcg

9

<210> 58
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<220>
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<222> (5)
<223> 5-Methyl Cytosine

<400> 58

<210> 59
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc Finger
peptide

<400> 59
Met Ala Glu Glu Arg Pro Tyr Ala Cys Pro Val Glu Ser Cys Asp Arg
1 5 10 15
Arg Phe Ser Arg Ser Asp Glu Leu Thr Arg His Ile Arg Ile His Thr
20 25 30

<210> 60
<211> 28
<212> PRT
<213> Artificial Sequence

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<400> 60
Gly Gln Lys Pro Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Xaa
1 5 10 15
Xaa Xaa Xaa Leu Xaa Xaa His Xaa Xaa Thr His Thr
20 25

<210> 61
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc Finger
peptide

<400> 61
Gly Glu Lys Pro Phe Ala Cys Asp Ile Cys Gly Arg Lys Phe Ala Arg
1 5 10 15

Ser Asp Glu Arg Lys Arg His Thr Lys Ile His Leu Arg Gln Lys Asp
20 25 30

<210> 62
<211> 10
<212> PRT
<213> Artificial Sequence . . .

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 62
Arg Gly Asp Ala Leu Thr Ser His Glu Arg
1 5 10

<210> 63
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 63
Arg Val Asp Ala Leu Glu Ala His Arg Arg
1 5 10

<210> 64
<211> 10
<212> PRT
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<220>
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peptide

<400> 64
Arg Glu Asp Ala Leu Ile Arg His Gly Lys
1 5 10

<210> 65
<211> 7
<212> PRT
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<223> Description of Artificial Sequence: Zinc Finger peptide

<400> 65
Glu Lys Arg His His Lys Arg
1 5

<210> 66
<211> 4
<212> PRT
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<220>
<223> Description of Artificial Sequence: Zinc Finger peptide

<400> 66
Gln Ser Leu Asp
1

<210> 67
<211> 37
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<220>
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<222> (29)
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<400> 67
gacgtgtgga ctgactgtga cacgccgnc cactata

37

<210> 68
<211> 7
<212> PRT
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<220>
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<400> 68
Arg Lys Arg Ala Gly Asp Tyr
1 5

<210> 69
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
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peptide

<400> 69
Arg Thr Leu Asp
1

<210> 70
<211> 37
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<220>
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oligonucleotide

<220>
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<222> (29)
<223> 5-Methyl Cytosine

<400> 70
gacgtgtgga ctgactgtga cacgccrnc cactata

<210> 71
<211> 7
<212> PRT
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peptide

<400> 71
Arg Lys Arg Asp Arg Asn His
1 5

<210> 72
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
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peptide

<400> 72
Gly Thr Leu Asp
1

<210> 73
<211> 37
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oligonucleotide

<220>
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<400> 73
gacgtgtgga ctgactgtga cacgccgrnc cactata

<210> 74
<211> 7
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<400> 74
Lys Thr Arg Thr Ser Asn Thr
1 5

<210> 75
<211> 4
<212> PRT
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<220>
<223> Description of Artificial Sequence: Zinc Finger peptide

<400> 75
Ala Ser Leu His
1

<210> 76
<211> 37
<212> DNA
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<220>
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<220>
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<222> (28)
<223> 5-Methyl Cytosine

<400> 76
gacgtgtgga ctgactgtga cacgccgnrc cactata

<210> 77
<211> 7
<212> PRT
<213> Artificial Sequence

37

<220>
<223> Description of Artificial Sequence: Zinc Finger
peptide

<400> 77
Thr Lys Arg His Asp Asn Arg
1 5

<210> 78
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc Finger
peptide

<400> 78
Thr Ser Leu Asp
1

<210> 79
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<220>
<221> modified_base
<222> (29)
<223> 5-Methyl Cytosine

<400> 79
gacgtgtgga ctgactgtga cacgcccanc cactata

37

<210> 80
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

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<210> 81
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic zinc
finger peptide

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<223> Any amino acid and this range may encompass 0-2
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<222> (4)..(8)
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<220>
<221> MOD_RES
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<223> Any amino acid and this range may encompass 9-14
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<220>
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<222> (25)..(30)
<223> Any amino acid and this range may encompass 3-6
      residues

<220>
<221> MOD_RES
<222> (31)
<223> Xaa is Histidine or Cysteine

<400> 81
Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      1           5           10          15

Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      20          25          30
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